

REMARKS

Applicants have carefully reviewed this Application in light of the Final Office Action dated April 15, 2009 (“Office Action”). The Office Action rejects Claims 1-24. To advance prosecution of this Application, Applicants herein amend Claims 1, 5, 9, 13, 17, and 21. Applicants do not admit that any amendments are necessary due to any prior art or any of the Office Action’s rejections. Applicants respectfully traverse the rejections and request reconsideration and allowance of Claims 1-24.

Claim Rejections -- 35 U.S.C. § 102

The Office Action rejects Claims 1-24 under 35 U.S.C. § 102(a) as being anticipated by Hovestadt, Kao, Keller, and Streit, *Scheduling in HPC Resource Management Systems: Queuing vs. Planning*, PROCEEDINGS OF THE 9TH WORKSHOP ON JOB SCHEDULING STRATEGIES FOR PARALLEL PROCESSING (“*Keller1*”) and Keller and Reinefeld, *Anatomy of a Resource Management System for HPC Clusters*, ANNUAL REVIEW OF SCALABLE COMPUTING, Vol. 3, 2001 (“*Keller2*”). Applicants respectfully traverse this rejection.

The cited references fail to teach, suggest, or disclose each and every limitation of Claim 1. For example, the cited references fail to teach, suggest, or disclose “determining an original subset of a plurality of nodes, the original subset comprising nodes currently unallocated to a job, each node in the plurality of nodes comprising a switching fabric integrated to a card and at least two processors integrated to the card” as recited in Claim 1. In rejecting Claim 1, the Office Action asserts that the “switching fabric” and “processors” in Claim 1 are not “patentable features.” (Office Action, p. 3). Specifically, the Office Action asserts: “This element does nothing to a method for determining an original subset of a plurality of nodes; in which the method solely results with selecting a job from a job queue; and executing the selected job using at least a portion of the original subset.” (Office Action, p. 3). Applicant respectfully disagrees. Contrary to the assertion that the switching fabric “does nothing,” amended Claim 1 recites that the “switching fabric allow[s] node to node communication during execution of a job.” With respect to the processors, amended Claim 1 recites “executing the selected job using one or more processors of one or more nodes.” Therefore, the Examiner should not disregard the portion of Claim 1 that recites “each node in the plurality of nodes comprising a switching fabric integrated to a card and at least two processors integrated to the card.”

As explained in Applicants' previous Response, *Keller1* and *Keller2* fail to teach, suggest, or disclose "determining an original subset of a plurality of nodes, the original subset comprising nodes currently unallocated to a job, each node in the plurality of nodes comprising a switching fabric integrated to a card and at least two processors integrated to the card" as recited in Claim 1. The cited portion of *Keller1* discloses a resource management system (RMS) for high performance computing (HPC) machines. (*Keller1*, pp. 1, 6; fig. 2). In particular, the cited portion of *Keller1* discloses using the RMS to negotiate a resource request. (*Keller1*, fig. 2). Thus, the Office Action seems to equate the HPC machines in *Keller1* with the "plurality of nodes" in Claim 1. (Office Action, p. 5). Even assuming for the sake of argument that the HPC machines in *Keller1* could be properly considered "a plurality of nodes" as recited in Claim 1 (which Applicants do not admit), *Keller1* would still fail to disclose, teach, or suggest any of the HPC machines in *Keller1* "comprising a switching fabric integrated to a card and at least two processors integrated to the card" as recited in Claim 1.

In view of *Keller1*'s deficiencies, the Office Action cites a portion of *Keller2* that discloses a cluster consisting of two frontend computers, an Ethernet switch, and 32 compute nodes. (*Keller2*, p. 20). Even assuming for the sake of argument that the Ethernet switch in *Keller2* could properly be considered "a switching fabric" as recited in Claim 1, *Keller2* would still fail to disclose, teach, or suggest "each node in the plurality of nodes comprising" the Ethernet switch, as recited in Claim 1. (Emphasis added). Instead, in *Keller2*, the Ethernet switch is completely separate from the two frontend computers and from the 32 compute nodes, which tends to teach away from the arrangement recited by independent Claim 1. (*Keller2*, p. 20). Moreover, even assuming again for the sake of argument that the Ethernet switch could properly be considered "a switching fabric" as recited in Claim 1, *Keller2* would still fail to disclose, teach, or suggest that the Ethernet switch is "integrated to a card," there being "at least two processors integrated to" the same card. (Emphasis added). Therefore, *Keller1* and *Keller2* fail to teach, suggest, or disclose, either expressly or inherently, "determining an original subset of a plurality of nodes, the original subset comprising nodes currently unallocated to a job, each node in the plurality of nodes comprising a switching fabric integrated to a card and at least two processors integrated to the card" as recited in Claim 1.

“To anticipate, every element and limitation of the claimed invention must be found in a single prior art reference, arranged as in the claim.” *Brown v. 3M*, 265 F.3d 1349, 1351 (Fed. Cir. 2001). “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987); M.P.E.P. § 2131 (quoting *Verdegaal*, 814 F.2d at 631). Moreover, “[t]he identical invention must be shown in as complete detail as is contained in the patent claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989); M.P.E.P. § 2131 (quoting *Richardson*, 868 F.2d at 1236). Furthermore, “[t]he elements must be arranged as required by the claim.” M.P.E.P. § 2131 (Rev. 6, Aug. 2007) (citing *In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990)). As shown above, *Keller1-Keller2* fails to disclose or suggest, either expressly or inherently, each and every limitation of Claim 1. Therefore, *Keller1-Keller2* fails to anticipate Claim 1 and its dependents. Accordingly, Applicants respectfully request reconsideration and allowance of Claim 1 and its dependents.

In rejecting Claims 9 and 17, the Office Action employs rationale similar to that used to reject Claim 1. Accordingly, for reasons analogous to those stated above with respect to amended Claim 1, Applicants respectfully request reconsideration and allowance of amended Claims 9 and 17 and their respective dependents.

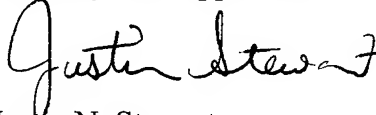
CONCLUSION

Applicants have made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicants respectfully request full allowance of all pending claims.

If the Examiner feels that a telephone conference would advance prosecution of this Application in any manner, the Examiner is invited to contact Justin N. Stewart, Attorney for Applicants, at the Examiner's convenience at (214) 953-6755.

Although Applicants believe that no fees are due, the Commissioner is hereby authorized to charge any fees or to credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,
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Date: June 15, 2009

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